

1. In an multi-protocol label switching system (MPLS) having a working path over which data is carried from a source to a destination and further having a protection path over which data from said source to said destination can be carried, a method of initiating an MPLS protection path switch over from said working path to said protection path comprising the steps of:
 - a. detecting a failure on said working path at a first switching node of said working path;
 - b. transmitting a failure notification message from said first switching node to at least a second, switching node of said working path;
 - c. routing data from said working path to said protection path upon the receipt of said failure notification message at at least one of: said second switching node and a third switching node of said working path.
2. The method of claim 1 further including the step of re-routing data from said protection path to said working path upon the determination that said failure on said working path has been corrected.
3. The method of claim 1 wherein said failure notification message travels along a path through said MPLS system, extending between said destination and said source.
4. A multi-protocol label switching (MPLS) system protection switch, said MPLS switch comprised of:

3 a data input port into which MPLS data is received from a data source;
4 a first data output port from which MPLS data is sent to a second MPLS
5 switching system comprising an MPLS working path;
6 a second data output port from which MPLS data is sent to a third MPLS
7 switching system comprising an MPLS protection path;
8 whereby data received at said data input port from said data source can be
9 selectively routed from said second MPLS switching system to said third MPLS
10 switching system.

5. The MPLS switching system of claim 4 further comprising a control input port whereat
protection path failure messages are received from at least one said second MPLS
switching system and said third MPLS switching system.

6. A multi-protocol label switching (MPLS) system comprised of:

a first MPLS protection switch having a data input port into which MPLS data is
received from a data source;

a second MPLS switching system coupled to said first MPLS protection switch
via a first data path carrying MPLS data, said first data path comprising an MPLS
working path;

a third MPLS switching system coupled to said first MPLS protection switch via a
second data path capable of carrying MPLS data, said second data path comprising an
MPLS protection path

10 an upstream reverse notification tree (RNT) data path extending at least between
11 said second MPLS switching system to said MPLS protection switch carrying data by
12 which a switchover from a working path to a protection path can be initiated.

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